

**Remarks/Arguments:**

**Amendments**

The specification has been amended to indicate a registered trademark. It is submitted that no new matter is introduced by these amendments.

**Rejection under 35 USC 102**

Claims 1, 9-13, 19-23, and 26 were rejected under 35 USC 102(b) as anticipated by Van Damme, EP 0 819 985 ("Van Damme"). This rejection is respectfully traversed.

Applicants claims recite an imageable composition that comprises a "water-soluble or water-dispersible binder." Further, claims 1-24 recite that the imaged imageable element is developed with water.

**1. Water-soluble binder or water-dispersible binder**

Van Damme discloses a radiation sensitive imaging element comprising on a hydrophilic surface of a lithographic base an image forming layer comprising (1) an alkali soluble or swellable resin having a phenolic hydroxy group, (2) a latent Brönsted acid, and (3) an infrared absorber, characterized in that said image forming layer comprises an amino crosslinking agent. Van Damme, Abstract.

The Office asserts that Van Damme discloses an imaging element that comprises "a water-soluble binder (hydrophilic binder)." Office action of 8/8/03, page 2, line 21. This assertion is respectfully traversed.

Applicants' initially note that, contrary to the assertion, 'water-soluble' and "hydrophilic" are not synonyms. Hydrophilic means that a material has an affinity for, attracting, adsorbing, or absorbing water. A hydrophilic material may be water-soluble, but not all hydrophilic materials are water-soluble.

The Office refers to page 5, lines 29-36. This passage and the paragraph before and the paragraph after read as follows:

According to another embodiment in connection with the present invention, the lithographic base comprises a flexible support, such as e.g. paper or plastic film, provided with a cross-linked hydrophilic layer. A particularly suitable cross-linked hydrophilic layer may be obtained from a hydrophilic binder cross-linked with a cross-linking agent such as formaldehyde, glyoxal, polyisocyanate or a hydrolysed tetra-alkylorthosilicate. The latter is particularly preferred.

As hydrophilic binder there may be used hydrophilic (co)polymers such as for example, homopolymers and copolymers of vinyl alcohol, acrylamide, methylol acrylamide, methylol methacrylamide, acrylic acid, methacrylic acid, hydroxyethyl acrylate, hydroxyethyl methacrylate or maleic anhydride/vinylmethylether copolymers. The hydrophilicity of the (co)polymer or (co)polymer mixture used is preferably the same as or higher than the hydrophilicity of polyvinyl acetate hydrolyzed to at least an extent of 60 percent by weight, preferably 80 percent by weight.

The amount of crosslinking agent, in particular of tetraalkyl orthosilicate, is preferably at least 0.2 parts by weight per part by weight of hydrophilic binder, preferably between 0.5 and 5 parts by weight, more preferably between 1.0 parts by weight and 3 parts by weight.

Van Damme, page 5, lines 25-36 (emphasis added)

When the cited paragraph is read in context, it is readily apparent that the hydrophilic binder in question is used to form a cross-linked hydrophilic layer, which provides the hydrophilic surface of the lithographic base. In Van Damme, the imaging forming layer is on the hydrophilic surface of the lithographic base so the binder is not part of the imaging layer. See, for example, claim 1.

Further, the hydrophilic binder is cross-linked so it will be insoluble in developers and fountain solution. During lithographic printing the hydrophilic surface revealed by the imaging and developing steps takes up water or a fountain solution. See, for example, Van Dame, page 1, lines 15-22, and specification of the instant application, page 1, lines 9-16. If the binder of

Van Damme were water-soluble, it would be removed during the printing and development steps, totally defeating its purpose.

Therefore, the binder disclosed by Van Damme:

- 1) is hydrophilic, not water-soluble;
- 2) is part of the hydrophilic surface of the lithographic base, not part of the imaging layer; and
- 3) is cross-linked , making it insoluble in water.

Van Damme does disclose a binder for the imaging layer:

The functioning of the plate as a negative-working plate is critically dependent upon the use of a mixture of an amino crosslinking agent and a [sic] alkali soluble or swellable resin having a phenolic hydroxy group since the use of either compound alone does not provide a useful developed image.

Van Damme, page 3, lines 25-27 (emphasis added).

Suitable resins having phenolic hydroxy groups for use in an image forming layer in connection with this invention are for example synthetic novolac resins such as ALNOVOL, a registered trade mark of Reichold Hoechst and DUREZ, a registered trade mark of OxyChem and synthetic polyvinylphenols [sic, polyvinylphenols] such as MARUKA LYNCUR M, a registered trade mark of Dyno Cyanamid.

Van Damme, page 3, lines 45-48 (emphasis added).

As described in the specification, "[p]henolic resins, such as resole resins, novolac resins, and polyvinyl phenols, can not be used in the imageable elements of the instant invention because they do not produce water-developable compositions." Specification, lines 23-25. Therefore, the resins used in the imaging layer of Van Damme can not be used in the imageable layer of the instant invention.

It is axiomatic that for a prior art reference to anticipate under § 102 it has to meet every element of the claimed invention. . . ." *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1980) (emphasis added). Van Damme does not disclose a imaging element in which the imaging layer comprises a "water-soluble or water-dispersible binder" as recited by applicants' claims. The rejection of claims 1, 9-13, 19-23, and 26 as anticipated by Van Damme should be withdrawn.

## **2. Developing in Water**

The Office asserts that Van Damme discloses "developing the imaged layer with an aqueous developer" and cites page 2, line 57, to page 3, line 9, and page 6, lines 12-13, of Van Damme. However, applicants' claims 1, 9-13, and 19-23 each recite developing the imaged imageable element with water, not with "an aqueous developer."

The imaged element of Van Damme is developed with an alkaline developing solution. Van Damme, page 3, lines 8-9; page 6 lines 12-18; and claim 10. Example 1 uses Fuji PS-plate developer DP-5. Van Damme, page 7, lines 41-43. Fuji PS-plate developer DP-5 is an described as "an alkaline aqueous developer." Van Damme, page 6, lines 14-18. As disclosed on page 2, lines 10-15 of the specification, by the use of water as the developer, applicants' avoid the environmental problem associated with the use of alkaline developers, such as the alkaline developers disclosed by Van Damme.

Developing the imaged imageable element with water is not disclosed by Van Damme. For this additional reason, the rejection of claims 1, 9-13, and 19-23 as anticipated by Van Damme should be withdrawn.

## **Rejection under 35 USC 103**

Claims 2-8, 14-18, 24-25, and 27-28 were rejected under 35 USC 103(a) as unpatentable over Van Damme in view of Murakami, U.S. Patent 4,425,405 ("Murakami"). This rejection is respectfully traversed.

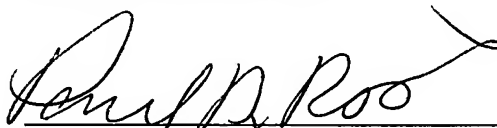
Murakami was cited to show that vinylpyrrolidone/vinyl acetate is a water-soluble polymer. Murakami discloses an ink jet recording sheet. Murakami, Title. It does not overcome the deficiencies of Van Damme, discussed above.

The Office has not made the *prima facie* case. Combination of Van Damme and Murakami in the manner indicated by the Office does not produce applicants' invention. The rejection of claims 2-8, 14-18, 24-25, and 27-28 as unpatentable over Van Damme in view of Murakami should be withdrawn.

### Conclusion

It is respectfully submitted that the claims are in condition for immediate allowance and a notice to this effect is earnestly solicited. The Examiner is invited to phone applicants' attorney if it is believed that a telephonic or personal interview would expedite prosecution of the application.

Respectfully submitted,



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